

What is claimed is:

1. A dental instrument comprising:

a generally cylindrical handle, a first metal tool tip and an elastomeric cover having an outer surface,

said handle being connected to said first metal tool tip,

said nonmetal cover being supported by said handle,

said cover having a central region, and a first and a second enlarged end region on opposite sides of said central region and integrally connected to said central region,

said central region having a central wall, said central wall having a smallest outer diameter at point of least wall thickness,

said first and said second enlarged end region each having having a largest outer diameter at a greatest wall thickness at a thickest point on said outer surface of said cover,

each said greatest wall thickness being at least 30 percent greater than said least wall thickness.

2. The dental instrument of claim 1 wherein at least one of said greatest wall thickness is at least 40 percent greater than said least wall thickness, and said cover has a length with a midpoint and two end points, said least wall thickness is within 20 percent of said cover length from said midpoint of said cover length, and each said greatest wall thickness is within 20 percent of said cover length from each said end point of said cover length.

3. The dental instrument of claim 1 wherein at least one of said greatest wall thickness is at least 50 percent greater than said least

wall thickness, and said cover outer surface is generally smooth and substantially continuously curved with intermittent protrusions.

4. The dental instrument of claim 1 wherein at least one of said greatest wall thickness is at least 70 percent greater than said least wall thickness, and said cover has a length with a midpoint and two end points, said least wall thickness is within 10 percent of said cover length from said midpoint of said cover length, and each said greatest wall thickness is within 10 percent of said cover length from each said end point of said cover length.

5. The dental instrument of claim 1 wherein at least one of said greatest wall thickness is at least 100 percent greater than said least wall thickness.

6. The dental instrument of claim 1 wherein said dental instrument further comprises a second tip.

7. The dental instrument of claim 1 wherein said nonmetal cover has an outer surface having a plurality of raised portions.

8. The dental instrument of claim 1 wherein said nonmetal cover comprises silicone polymer.

9. The dental instrument of claim 1 wherein said nonmetal cover comprises elastomeric material.

10. The dental instrument of claim 1 wherein said nonmetal cover is adhered by an adhesive to said handle.

11. The dental instrument of claim 1 wherein said nonmetal cover comprises elastomeric material having a shore hardness of less than 60.

12. The dental instrument of claim 1 wherein said nonmetal cover comprises elastomeric material having a plurality of colors.

13. The dental instrument of claim 1 wherein said plurality of colors form generally parallel streaks.

14. The dental instrument of claim 1 wherein said central region has a cover outer surface and at least of portion of said central region outer surface is generally shaped like the central portion of one of the elongated sides of an ellipse when the central region is viewed in longitudinal cross-section.

15. The dental instrument of claim 1 wherein said handle is effectively and substantially cylindrical.

16. The dental instrument of claim 1 wherein said central region length has a length of not more than 98 percent of the length of the cover.

17. The dental instrument of claim 1 further comprising a first connector, said first connector being connected to said handle and said first tip.

18. The dental instrument of claim 17 further comprising a second tip and a second connector, said second connector being connected to said handle and said second tip.

19. A dental instrument comprising:
a generally cylindrical metal handle, a first and a second tip and a cover comprising elastomeric material,
said handle being connected to said first and said second tip,
said cover being supported by said handle,
said cover having a central region, and a first and a second enlarged end region on opposite sides of said central region and integrally connected to said central region,
said central region having a central wall, said central wall having a smallest outer diameter at point of least wall thickness,
said first and said second enlarged end region each having an end wall, each said end wall having a largest outer diameter at a point of greatest wall thickness,
each said greatest wall thickness being at least 30 percent greater than said least wall thickness.

20. The dental instrument of claim 19 wherein said cover comprises silicone polymer.

21. A dental instrument, comprising:

a nonmetal cover,

a cylindrical metal handle tube having a central channel,

a metal tie bar, and

a first metal tool tip and a second metal tool tip,

each said tool tip being connected to an opposite end of said metal tie bar, said nonmetal cover being supported by said cylindrical metal handle tube, said metal tie bar extending through said central channel of said cylindrical metal handle tube,

said cover having a central region, and a first and a second enlarged end region on opposite sides of said central region and integrally connected to said central region,

said central region having a central wall, said central wall having a smallest outer diameter at point of least wall thickness,

said first and said second enlarged end region each having an end wall, each said end wall having a largest outer diameter at a point of greatest wall thickness,

each said greatest wall thickness being at least 30 percent greater than said least wall thickness.